

USCMS Engineer Status Report for March 2004

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1 Work Performed This Month

Started thinking about working at CERN for a year. Ian Willers and Martin Liendl were suggesting it for some continuity of the DDD maintenance and also to be more directly involved in the Conditions DB efforts as they are developing within CMS Core Software as well as within the sub-detector and data-centric view of the databases.

Attended CMS Week, March 15.

DDD:

HCAL Barrel: I started with Sunanda Banerjee's Geant4 algorithm and parameters and developed the XML and re-wrote the C++ provided as a DDAlgorithm. While working on the DDHCalBarrelAlgo I confirmed a bug which Martin Liendl had found in the SEAL software. Committed the code to Geometry project (version 1.5.0) for Sunanda to test and use it as an example and expand it to other HCAL sections (endcap, etc.). Presented this at CMS Week.

Divisions: Discussed with Pedro Arce the need for a Division mechanism in the DDD. This is a request that has been given to us many times. I started this but was having trouble migrating Geant4 code (again) to DDD. Anyway, this was started using the same model from Geant4 divisions... Simply a re-write (like the HCAL Barrel, but part of the core DDD instead of Geometry project).

Conditions and other DB:

Met with Martin Liendl, Frank Glege, Vladimir Korenkov, Olga Kodolova, Elena Tikhonenko and discussed the coming visits of some database experts

from Russia to work on Conditions and other database issues. I would be working closely with such database experts.

User Support:

Students: Continue to help student efforts to use CMS software.

2 Status of Deliverables

Divisions may be late.

3 Plans For Next Month

Go to CERN to overlap with Martin Liendl before he leaves.

Divisions in DDD.

4 Longer Term Plans

Plan move to CERN for 1 year.

Finish Division before April 30 (I hope)